

In the Claims:

1. (currently amended) A method of transfecting a cell, comprising:

a) providing:

i) a transfection complex immobilized on a surface, said complex comprising a nucleic acid and first, second, and third complexing agents, said first complexing agent comprising a ligand for a receptor, said second complexing agent comprising a DNA binding molecule, and said third complexing agent comprising a membrane permeable molecule; wherein said DNA binding molecule is covalently linked to said ligand for a receptor; and

ii) a eukaryotic cell; and

b) contacting the cell with the nucleic acid in the transfection complex under conditions such that the cell is transfected.

2. (canceled)

3. (previously presented) The method of Claim 1, wherein the DNA-binding molecule is a cationic protein.

4. (previously presented) The method of Claim 1, wherein the membrane permeable molecule is a cationic lipid.

5. (canceled)

6. (original) The method of Claim 1 wherein the transfection complex further comprises one or more cationic lipids.

7. (original) The method of Claim 6, wherein the ligand is transferrin and the cationic protein is polylysine.

8. (previously presented) The method of Claim 1, wherein the transfection complex further comprises one or more additional complexing agents selected from the group consisting of targeting molecules, transcription molecules, nucleic acid degradation inhibitors, cell growth and integrity modulators, and mixtures thereof.

9. (original) The method of Claim 1, further comprising the step of expressing the nucleic acid in the transfected cell.

10. (original) The method of Claim 9, further comprising the step of detecting the expression of the nucleic acid in the transfected cell.

11. (currently amended) A method of transfecting a eukaryotic cell, comprising

a) immobilizing a transfection complex on a surface, said complex comprising a nucleic acid and first, second and third complexing agents, said first complexing agent comprising a ligand for a receptor, said second complexing agent comprising a DNA binding molecule and said third complexing agent comprising a membrane permeable molecule; wherein said DNA binding molecule is covalently linked to said ligand for a receptor; and

b) contacting the eukaryotic cell with the immobilized nucleic acid in the transfection complex under conditions sufficient to transfect the cell.

12. (currently amended) A method of transfecting a eukaryotic cell, comprising:

a) combining a nucleic acid with first, second and third complexing agents, said first complexing agent comprising a ligand for a receptor, said second complexing agent comprising a DNA binding molecule, and said third complexing agent comprising a membrane permeable molecule, so as to form at least one transfection complex comprising nucleic acid and said first and second complexing agent; wherein said DNA binding molecule is covalently linked to said ligand for a receptor;

b) immobilizing said transfection complex on a surface so as to form immobilized nucleic acid; and

c) contacting said eukaryotic cell with said immobilized nucleic acid in said transfection complex under conditions such that said cell is transfected.

13. (currently amended) A method of transfecting a eukaryotic cell, comprising:

- a) covalently linking transferrin to polylysine to form a transferrin-polylysine complex;
- b) combining a nucleic acid and a cationic lipid with said covalently linked transferrin-polylysine complex to form at least one transfection complex;
- c) immobilizing said transfection complex on a surface so as to form immobilized nucleic acid;
- d) contacting said eukaryotic cell with said immobilized nucleic acid in said transfection complex under conditions such that said cell is transfected.

14-24. (canceled)

25. (currently amended) A transfection complex comprising a nucleic acid and first, second and third complexing agents, said first complexing agent comprising a ligand for a receptor, said second complexing agent comprising a DNA binding molecule and said third complexing agent comprising a membrane permeable molecule, wherein said DNA binding molecule is covalently linked to said ligand for a receptor; and wherein said transfection complex is immobilized to a surface.

26. (canceled)

27. (original) The transfection complex of Claim 25, wherein the DNA-binding molecule is a cationic protein.

28. (previously presented) The transfection complex of Claim 25, wherein the membrane permeable molecule is a cationic lipid.

29. (canceled)

30. (currently amended) The transfection complex of Claim 295, wherein the ligand is transferrin and the cationic protein is polylysine.

31. (currently amended) The transfection complex of claim 295 further comprising one or more cationic lipids.

32. (previously presented) The transfection complex of Claim 25, further comprising at least one additional complexing agent selected from the group consisting of targeting molecules, transcription molecules, nucleic acid degradation inhibitors, cell growth and integrity modulators, and mixtures thereof.

33. (canceled)

34-36. (canceled)

37. (currently amended) A method of transfecting a cell, comprising:

a) providing:

i) a transfection complex immobilized on a surface, said complex comprising a nucleic acid and first, second, and third complexing agents, said first complexing agent comprising a ligand for a receptor, said second complexing agent comprising a DNA binding molecule, and said third complexing agent comprising a membrane permeable molecule; wherein said DNA binding molecule is covalently linked to said ligand for a receptor; and

ii) a eukaryotic cell; and

b) contacting the cell with the immobilized transfection complex on the surface under conditions such that cells are transfected using an active transport process.

38. (previously presented) A transfection complex comprising a nucleic acid, a cationic lipid, a ligand for a receptor and a DNA binding protein, wherein the ligand is a viral protein and wherein the viral protein is covalently bound to the DNA binding protein, and wherein said transfection complex is immobilized on a surface.

39. (original) The transfection complex of Claim 38, wherein the viral protein is selected from the group consisting of penton protein, HIV protein GP120, equine rhinitis A virus protein VP1, human adenovirus protein E3, and Epstein-Barr virus protein GP350.

40. (original) The transfection complex of Claim 38, wherein the viral protein is penton protein.

41. (original) The transfection complex of Claim 38, wherein the DNA-binding protein is selected from the group consisting of polylysine and a histone.

42. (original) The transfection complex of claim 38, wherein the cationic lipid is lipofectamine.